

Multiplying and dividing by 10, 100 and 1000

M	HTh	TTh	Tn	100s	10s	1s	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$
					1	3	6		
				1	3	6			
		1	3	6	0	0			
					2	4	7		
					2	4	7		
					0	2	4	7	

Each digit is ten times greater

Each digit is ten times smaller

millions digit round multiple positive negative

136×10
move digits 1 column left
 136×1000
move digits 3 columns left

$24.7 \div 10$
move digits 1 column right
 $24.7 \div 100$
move digits 2 columns right

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100



$1^2 = 1 \times 1 = 1$
 $2^2 = 2 \times 2 = 4$
 $3^2 = 3 \times 3 = 9$

A square number is the result of multiplying a number by itself.

$1^3 = 1 \times 1 \times 1 = 1$
 $2^3 = 2 \times 2 \times 2 = 8$
 $3^3 = 3 \times 3 \times 3 = 27$

A cube number is the result of multiplying a whole number by itself, then by itself again.



prime common factor multiple multiplier divisor

A prime number has exactly 2 factors: 2, 3, 5, 7, 11, 13, 17, 19...

A composite number has more than 2 factors: 4, 6, 8, 9, 10, 12...



If I know... then I also know... because...

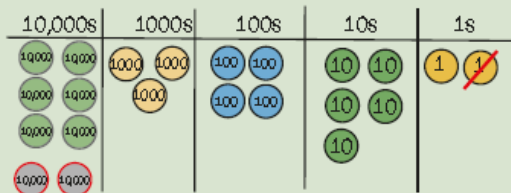
Factors of 15 = {1, 3, 5, 15}
Factors of 21 = {1, 3, 7, 21}
1 and 3 are common factors of 15 and 21

Multiples of 3 are 3, 6, 9, 12
Multiples of 4 are 4, 8, 12, 16
12 is a common multiple of 3 and 4

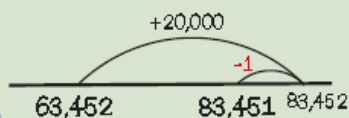
Year 5 Term 2



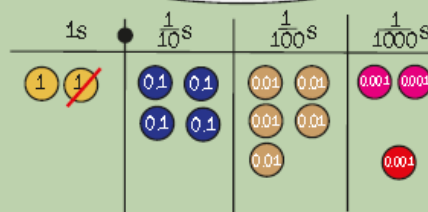
$63,452 + 19,999$
Round then adjust



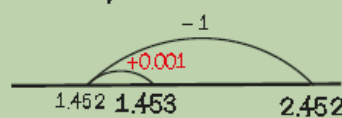
Add 20,000 then subtract 1



$2.452 - 0.999$
Round then adjust



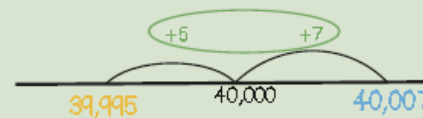
Take away 1 then add 1 thousandth



$40,007 - 39,995$
Find the difference between two numbers



Count on 5 from 39,995 to 40,000, then 7 more so the difference between them is 12



Written methods

$$\begin{array}{r} 25,648 \\ + 42,524 \\ \hline 68,172 \\ \hline \end{array}$$

$$\begin{array}{r} 25,648 \\ + 42,524 \\ \hline 68,172 \\ \hline \end{array}$$

$$\begin{array}{r} 45,748 \\ - 26,374 \\ \hline 19,374 \\ \hline \end{array}$$

sum total subtract difference

